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Supervision equipment and procedure for electro-pneumatic position regulator - uses test signal superimposed onto position signal and microprocessor analysis to provide up to date indication of operational efficiency

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Abstract (Basic): DE 4419548 A

The procedure for supervision of the position regulator efficiency involves a test signal which is superimposed onto to the system position signal until a change in the position is initiated. The amplitude of the test signal is arranged to increase continuously from an initial value of zero. The test signal has a frequency which is less than the frequency limit of the system as a whole. The eventual change in position is registered, together with the magnitude of the test signal, and the valves are used by a microprocessor to calculate the hysteresis at that time, and thus the operational efficiency of the position regulator. The supervisory procedure can be repeated periodically.

USE/ADVANTAGE - For e.g. throttle elements in position devices with pneumatic drives e.g. ball rods with thrust or lift valves. Enables hysteresis caused by friction between moving element and seal to be checked and signalled to maintenance personnel if in excess of preset value.

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Title Terms: SUPERVISION; EQUIPMENT; PROCEDURE; ELECTRO; PNEUMATIC; POSITION; REGULATE; TEST; SIGNAL; SUPERIMPOSED; POSITION; SIGNAL; MICROPROCESSOR; ANALYSE; UP; DATE; INDICATE; OPERATE; EFFICIENCY

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